Report of the AOCS Industrial Oils and Derivatives Committee

K. E. HOLT, Chairman

THERE ARE CURRENTLY seven active subcommittees in the Industrial Oils and Derivatives Committee. Following is a report on the activities and plans of these subcommittees.

Drying Oils Subcommittee—D.S. BOLLEY, Chairman

The Drying Oils Subcommittee has reached the collaborative phase in their development of an instrumental method for measuring haze in drying oils. The method under investigation uses a Nephelometer. Additional collaborators are needed and any laboratory having a Nephelometer and willing to participate is requested to contact the Subcommittee chairman.

Polymerized Acids Subcommittee—HAROLD FISHER, Chairman

The Subcommittee is initiating a collaborative program to check the suitability of ASTM method D445 for measuring the Kinematic Viscosity of polymerized acids. Three samples representing various grades of polymerized acids will be distributed to four laboratories. The measurements will be made at 100F and 210F.

Methods for determination of composition of polymerized acids are in the process of development in several laboratories. Problems on reproducibility have been encountered and the Subcommittee will delay their study of these methods until the problem is resolved.

Dibasic Acids Subcommittee—E. N. GERHARDT, Chairman

Methods for Acid Value (Purity by Total Acidity) and Color (by APHA) have been approved by the Subcommittee and will be submitted to the Industrial Oils and Derivatives Committee for letter ballot approval.

The Subcommittee plans will focus on the development of official methods for freezing point and color stability of dibasic acids. AOCS method Tr-1a-64T, titer of Fatty Acids will be modified for use on dibasic acids and submitted to the Subcommittee for approval prior to a collaborative study. Methods for measuring color stability of dibasic acids are being solicited by the Subcommittee chairman.

Hydrogenated Oils Subcommittee—R. O. WALKER, Chairman

A collaborative study is planned on a colorometric method for determination of nickel in hydrogenated oils. A hydrogenated castor oil will be used and those laboratories that have atomic absorption equipment are being requested to check the sample by both methods. Modifications to method Tl-1a-64T Saponification Value and Tk-1a-64T Unsaponifiable Matter are being proposed by the Subcommittee and will be submitted for letter ballot approval.

Fatty Nitrogen Subcommittee—H. W. JACKSON, Chairman

A collaborative study is under way using GLC for determination of Primary Fatty Amines. A standard mixture of fatty amines is being run using a TFA derivative and a dimethyl amine derivative. It is hoped that a tentative primary amine method will evolve from this study.

Future plans include a study of a method for total amide using IR spectroscopy.

Commercial Fatty Acids Subcommittee—R. O. WALKER, Chairman

The official AOCS method Td-3a-64 Color After Heating continues to be studied in an attempt to develop a method that gives a more critical evaluation of fatty acid stability and has better precision.

The precision of the Gardner Color Method is a definite factor in the precision of the Color After Heating Method and the next collaborative study will be designed to minimize the effect of precision in reading Gardner Colors.

Epoxidized Oils Subcommittee—W. F. GOLDSMITH, Chairman

The Subcommittee completed their collaborative study on the "Jay" method for oxirane oxygen, comparing it with the official AOCS method Cd-9-57. The Subcommittee decided to submit the Jay method to Industrial Oils and Derivatives Committee letter ballot, however, this decision was not unanimous.

The "Jay" method gives slightly higher results than the official method but the results are not above theoretical. The reagents used in the "Jay" method have greater stability than those used in the official method; this reduces standardization time but the cost of the two methods is about the same due to higher cost of Jay method reagents.

The precision of the AOCS method is better than the Jay method; this may be partially due to a greater familiarity of the participating labs with the official method. The precision on both methods is acceptable.

• *Report on Fats and Oils . . .*

(Continued from page 106A)

no need to comply with other control programs. Unless some change in the program is made, there exists a real possibility that the 1968 crop will equal or exceed the 1967 crop even though there appears no fundamental demand for oil and meal of this magnitude.

DAVID M. BARTHOLOMEW
Commodity Analyst
Merrill, Lynch, Pierce, Fenner & Smith Inc.

• *Obituary*

W. S. Belden (1921) died Jan. 11, 1968, in Fresno, Calif.